



STATE OF MARYLAND

DHMMH

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October 5, 2012

Public Health & Emergency Preparedness Bulletin: # 2012:39
Reporting for the week ending 09/29/12 (MMWR Week #39)

CURRENT HOMELAND SECURITY THREAT LEVELS

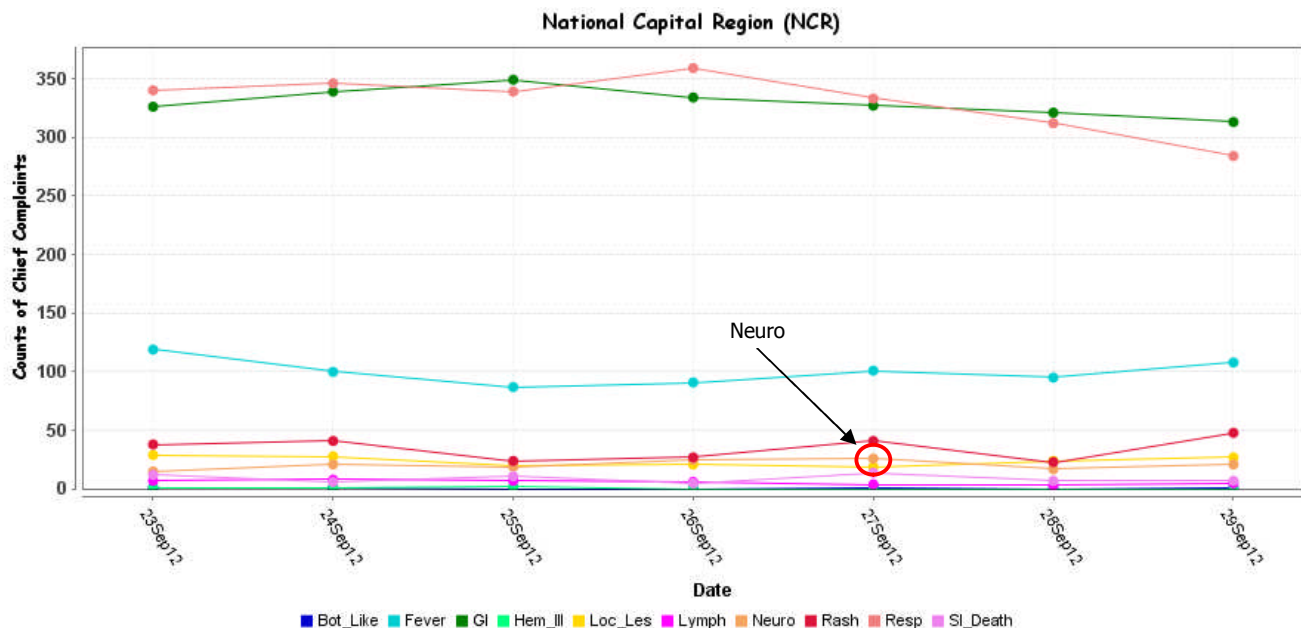
National: No Active Alerts
Maryland: Level One (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

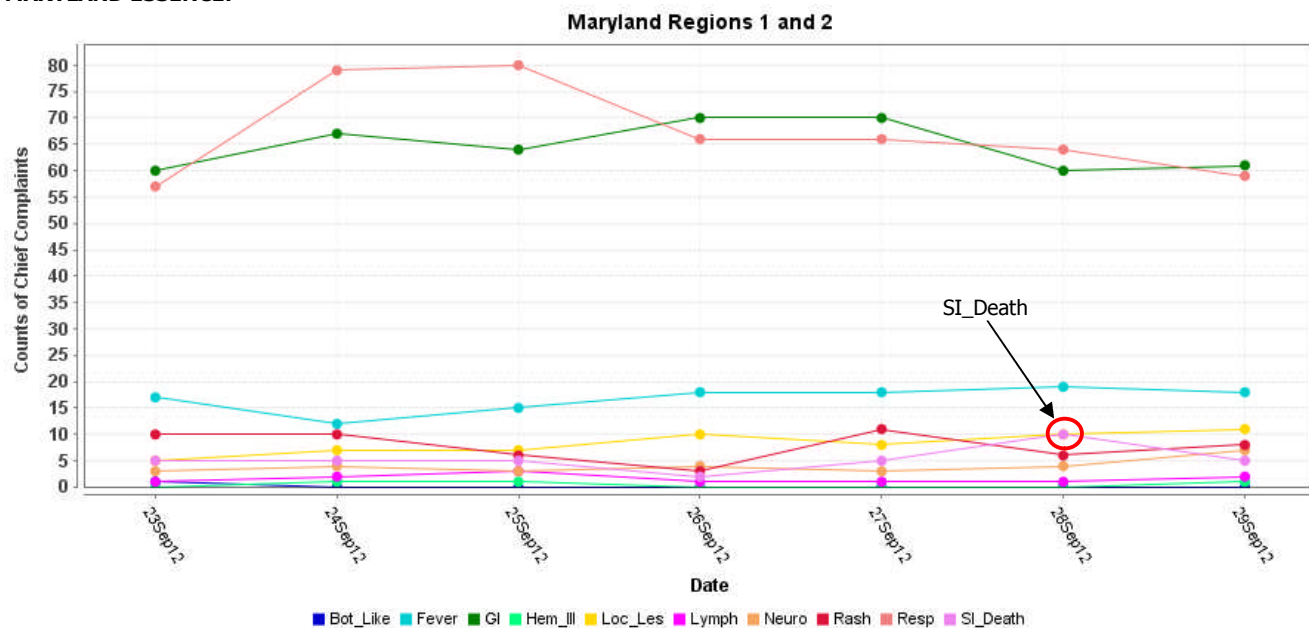
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

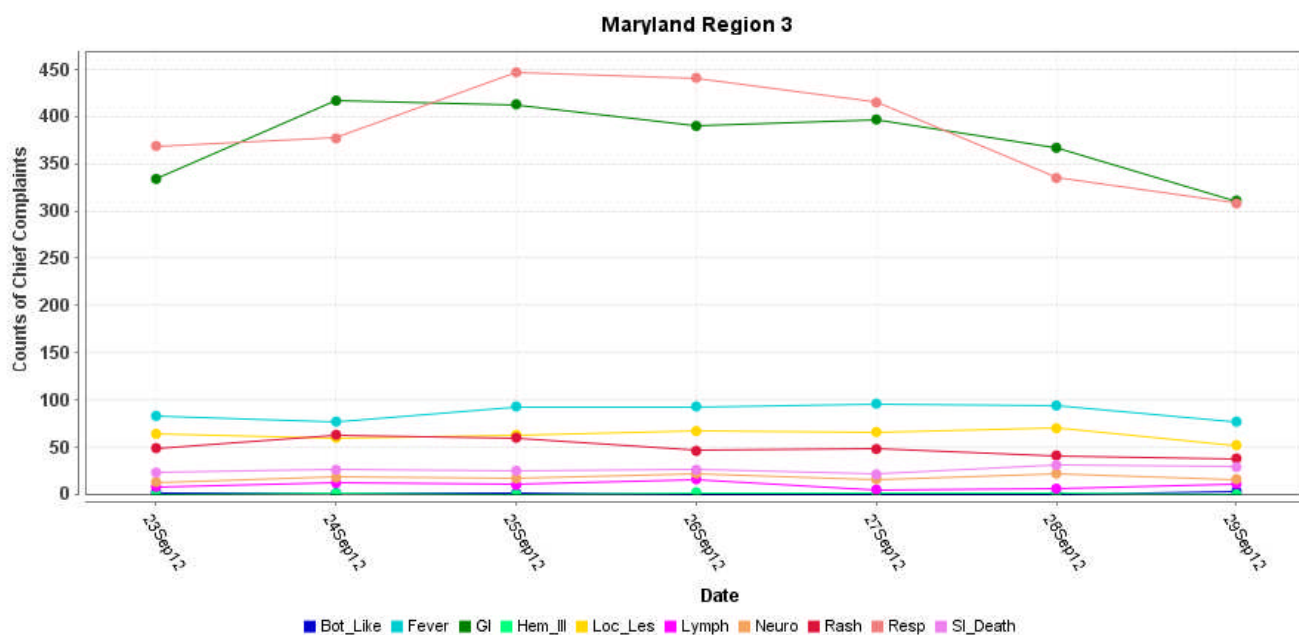


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

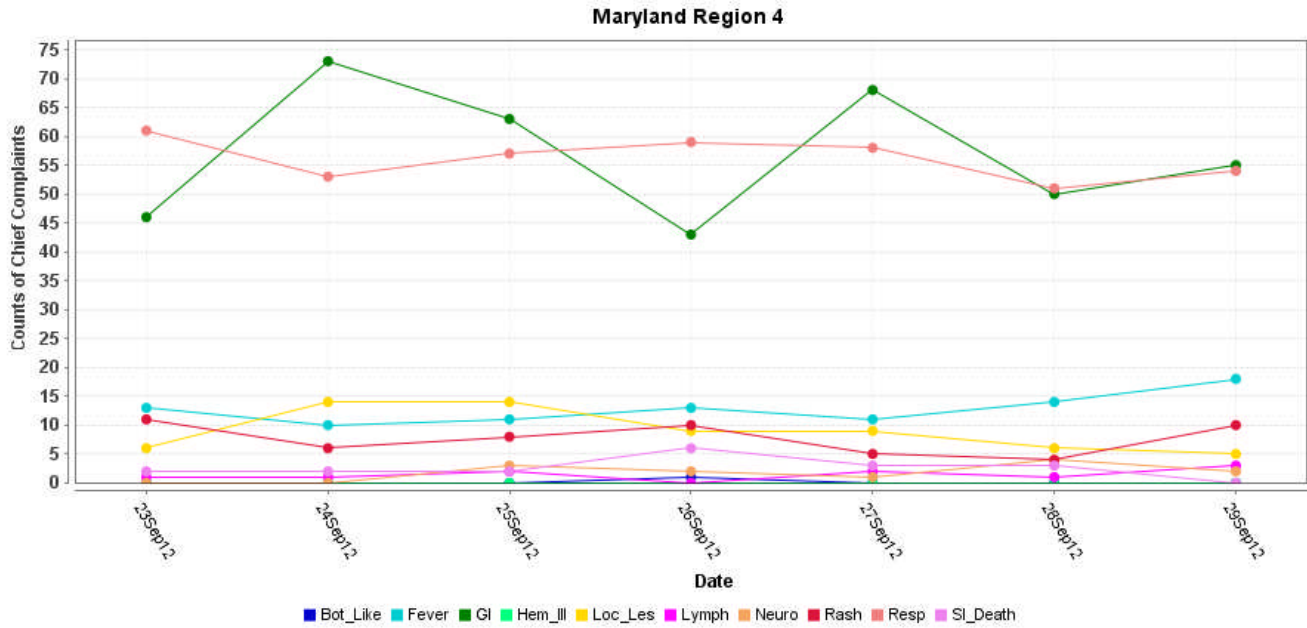
MARYLAND ESSENCE:



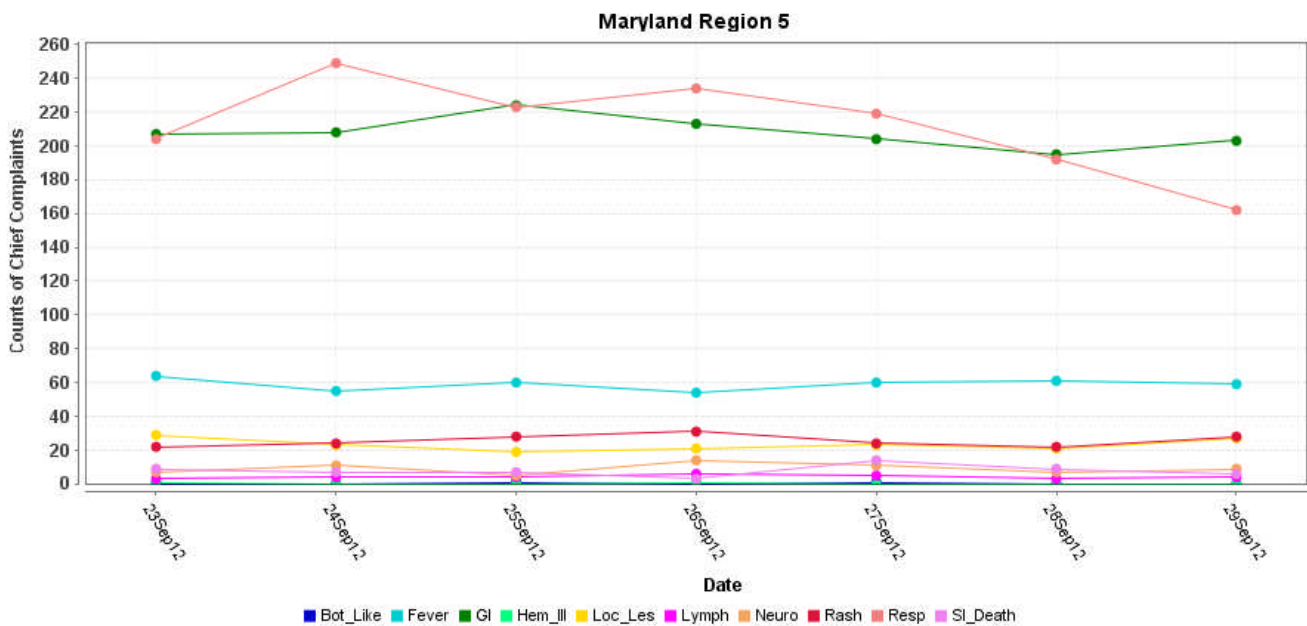
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

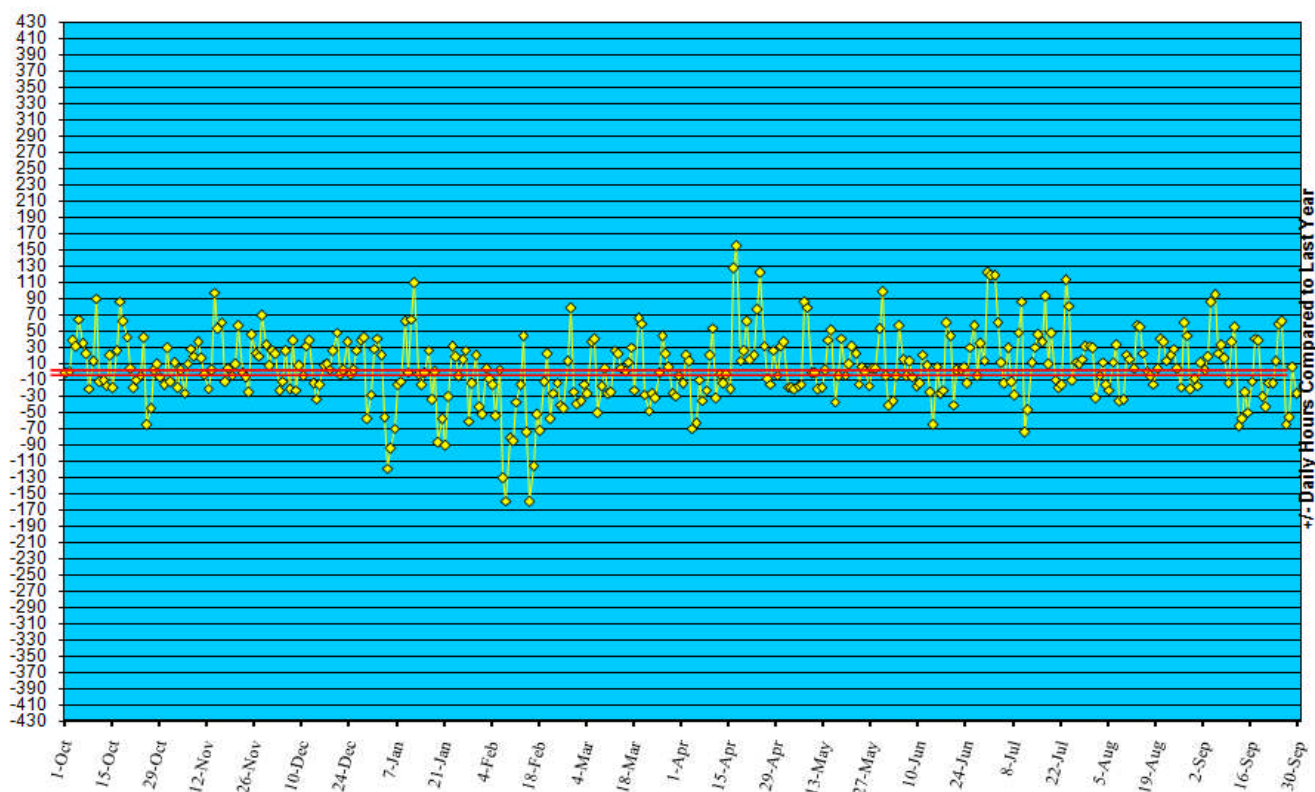


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '11 to September 29, '12



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in June 2012 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:

New cases (September 23 – September 29, 2012):
Prior week (September 16 – September 22, 2012):
Week#39, 2011 (September 25 – October 1, 2011):

Aseptic

14
18
9

Meningococcal

0
0
0

3 outbreaks were reported to DHMH during MMWR Week 39 (September 23-29, 2012)

1 Foodborne outbreak

1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Food Service Facility

1 Respiratory illness outbreak

1 outbreak of AFRD/PNEUMONIA in a Nursing Home

1 Rash illness outbreak

1 outbreak of SCABIES in a Nursing Home

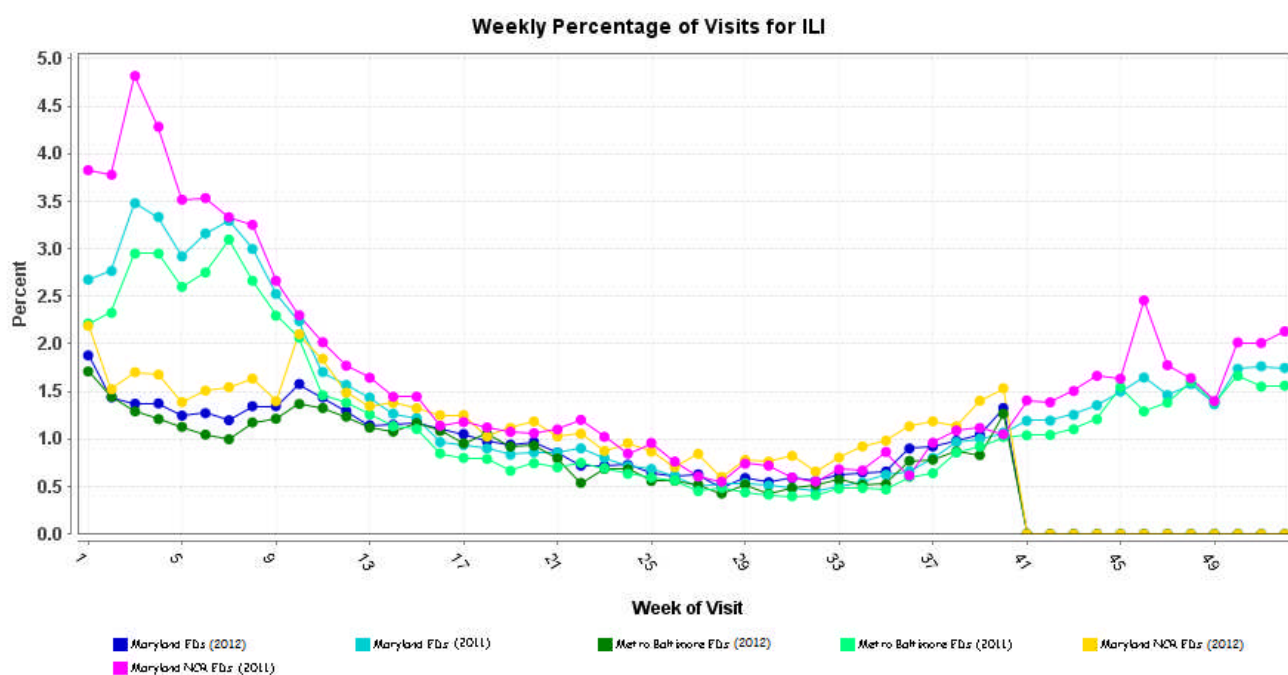
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May.

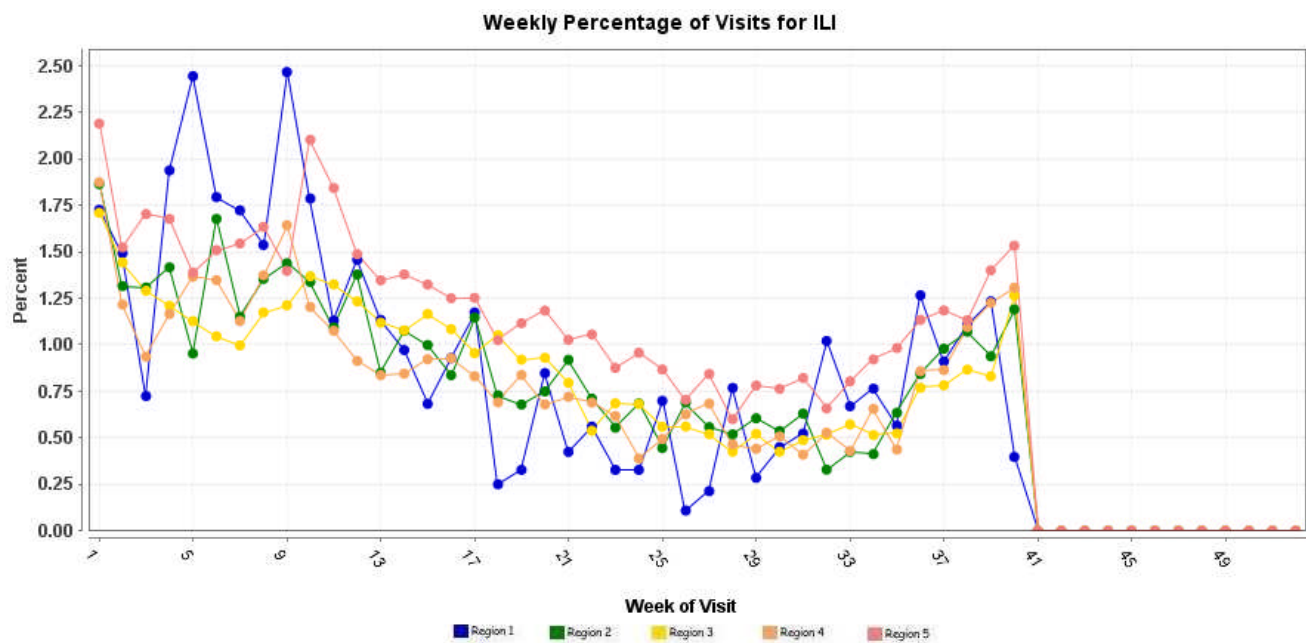
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



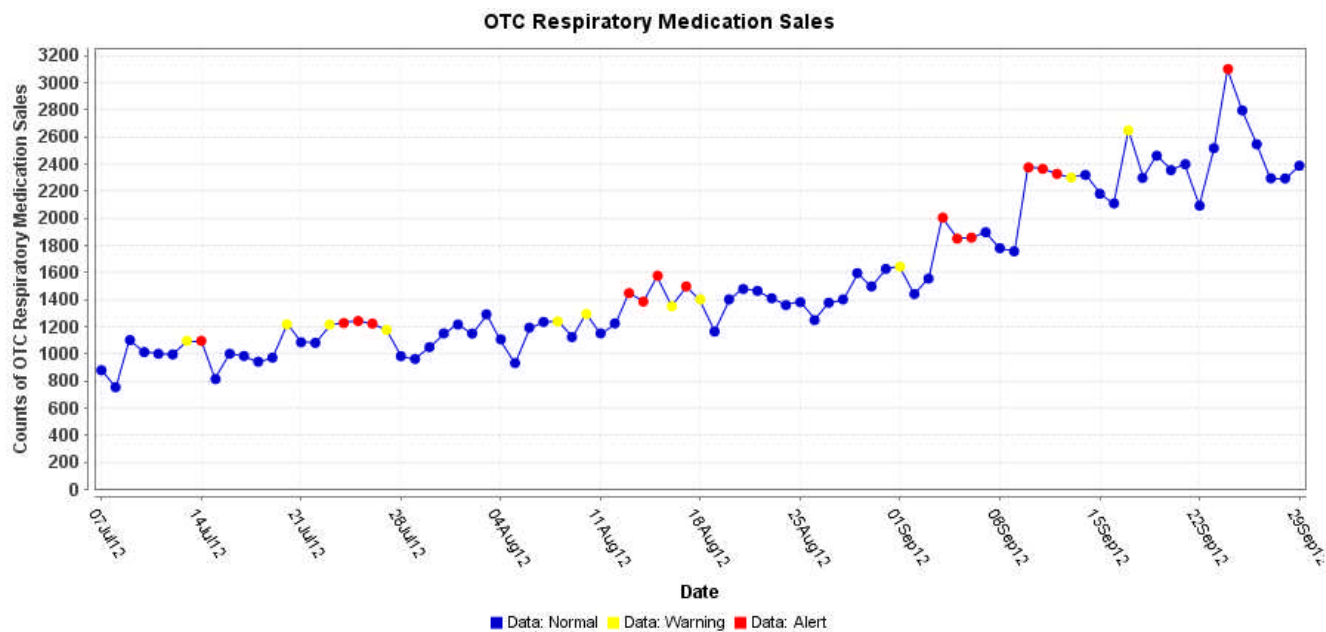
* Includes 2011 and 2012 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2012 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic. As of August 10, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 608, of which 359 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (VIET NAM): 20 September 2012, A highly-virulent, newly-mutated bird flu H5N1 strain is feared to [be] spreading from north Viet Nam to the south at a menacing pace, warned deputy head of Animal Health Department Pham Van Dong. Speaking in Ha Noi yesterday [18 Sep 2012], Dong, whose department comes under the Ministry of Agriculture and Rural Development, said the outbreak of this strain started in July [2012] and has so far attacked 7 northern provinces plus the central province of Quang Ngai. To prevent further spreading to the south, the ministry has ordered provinces to strengthen inspection and control activities. In the meantime, live poultry due to be carried from north to south will not pass through the central provinces of Quang Ngai or Kon Tum until the outbreak is completely under control. The ministry also asked local authorities to clamp down on illegal poultry imports and to tighten inspections of trans-border poultry loads destined for Viet Nam. At the same time, vaccination and disinfection activities should be strengthened in affected areas.

NATIONAL DISEASE REPORTS*

E. COLI (NORTH AMERICA): 26 September 2012, Health officials say they have confirmed the steaks that made 4 people sick in Edmonton originated from an XL Foods plant and were sold at a Costco store in the northeast part of the city. CFIA is recalling beef steaks sold at the northeast Edmonton Costco under the Kirkland brand. The steaks were sold at the Costco store on 50th Street and 136th Avenue under the Kirkland brand and were contaminated with *E. coli* [O157]. Alberta Health Services (AHS) linked the striploin grilling steaks with 4 cases of illness announced last week [week of 17 Sep 2012]. "We know the food source. What we don't know at this point is the source of the contamination," said Dr Gerry Predy, Alberta's senior medical health officer. He said health officials were able to link the illness to the store after testing a steak provided by one of people who became sick. The Canadian Food Inspection Agency has issued a health alert over the meat but it is still unclear how and where the meat became contaminated. The steaks were sold between 4 and 7 Sep 2012, and are marked with one of the following "Packed On" dates: 12 / SE / 04, 12 / SE / 05, 12 / SE / 06, and 12 / SE / 07. Consumers are urged to check meat they have in their freezers to see if it is covered by the alert. Predy said during their investigation, it was discovered that Costco stores across the province used a tenderization process that may have played a role in the *E. coli* illnesses. The stores would run steaks through a machine that would strike them with a meat tenderizer with a needle-like surface. Predy says if *E. coli* bacteria were on the surface of the meat, the process may have forced it deeper into the steak, where it would be more difficult to kill while cooking. "Our public health message has been that if you're eating steak, it's OK to eat it rare," said Predy. "If this process is going to be used, then the public needs to know it has been used so the public can use necessary precautions." He said the process doesn't violate health codes, but AHS has asked stores in the province to stop using the machines as a precaution. The steaks came from the XL Foods processing plant near Brooks in southern Alberta, said Canadian Food Inspection Agency spokesperson Tim O'Connor. That's the same facility where 250 ground beef products have been recalled from stores across the country. No direct link between *E. coli* illnesses and the plant has been established, said O'Connor. "There are many steps in-between and, while it is possible, we cannot say conclusively at this time that that [facility] is the source of contamination," he said. In a statement, XL Foods said it is co-operating with the CFIA and AHS in their investigations. The company said a recent review of its operation found 2 "deficiencies" that could have played a part in the contamination. It says it has since changed those procedures. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI EHEC (MISSOURI): 25 September 2012, The Cape Girardeau County Public Health Center and the Missouri Department of Health and Senior Services have identified an increase in the number of positive Shiga toxin producing *E. coli* cases across the Southeast region. According to the health center, the strain has been identified as *E. coli* O157:H7. They say currently there have been 10 reports of cases that may be related to a particular event or risk factor. The age distribution of cases is 16 months to 72 years and it appears that gender is split 50/50 among females and males. The health center says the counties of patient residence include:

Cape Girardeau: 7 cases (2 confirmed, 5 suspect)
Pemiscot: 1 case confirmed
Stoddard: 1 case confirmed
Perry: 1 case confirmed

The health center says 4 of the cases are PFGE matched, which means they are from a common source. They say they are working at this time to determine the source. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE BREDENEY (USA): 24 September 2012, A New Mexico-based company has recalled 76 types of peanut butter and almond butter after a product it sold to Trader Joe's groceries was linked to a salmonellosis outbreak. Sunland Inc. recalled the products under multiple brand names after the FDA and the CDC linked 29 salmonella illnesses in 18 states to Trader Joe's Creamy Salted Valencia Peanut Butter. Sunland manufactures and packages the Trader Joe's product. Sunland spokeswoman Katalin Coburn said the company recalled the other peanut and almond butters because they were manufactured with the same equipment as the Trader Joe's product. None of the other products have been linked to illnesses. Trader Joe's recalled the Creamy Salted Valencia Peanut Butter from its stores on Saturday [22 Sep 2012] after consultation with the FDA and the CDC. Coburn said the FDA is currently inspecting Sunland's plant in Portales, New Mexico. Those sickened reported becoming ill between 11 Jun 2012 and 2 Sep 2012, according to the CDC. More than 75 percent of those who became ill were children under the age of 18. No deaths have been reported. Brand names included in the recall are Archer Farms, Earth Balance, Fresh & Easy, Heinen's, Joseph's, Natural Value, Naturally More, Open Nature, Peanut

Power Butter, Serious Food, SnacLite Power, Sprouts Farmers Market, Sprout's, Sunland, and Dogsbutter. 2 additional Trader Joe's products are also included in the expanded recall -- Trader Joe's Valencia Peanut Butter with Roasted Flaxseeds and Trader Joe's Almond Butter with Roasted Flaxseeds. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

SALMONELLOSIS, SEROTYPE STANLEY (EUROPEAN UNION): 24 September 2012, An outbreak of *Salmonella Stanley* infection involving 167 confirmed and 254 probable cases is on-going in several Member States of the European Union (EU). As cases do not have travel history outside the EU within the usual incubation period for salmonellosis, these findings strongly suggest a multi-state outbreak currently taking place in several countries in the EU. The descriptive epidemiology of human cases indicates a transmission originating from a persistent common source or multiple sources in the EU that are contaminated with isolates indistinguishable by XbaI-PFGE. Food and veterinary investigations conducted in Austria, Belgium, Germany, Czech Republic, Poland, and Hungary identified an indistinguishable XbaI-PFGE fingerprint and a common resistance to nalidixic acid with concomitant decreased susceptibility to ciprofloxacin, among isolates originating from the turkey production chain (turkeys and turkey meat). Isolates with indistinguishable PFGE patterns were also detected in some cases from broiler flocks (breeding and fattening chicken flocks) and meat from other animal species (broiler meat, beef and pork.) The epidemiological and microbiological information gathered through the public health, food, and veterinary investigations strongly suggest that the turkey production chain is the source of the outbreak. However, the contribution of other food and animal sources, such as beef, pork, and broiler meat to the outbreak cannot be ruled out. As control measures have not yet been implemented to remove the source of infection and potential food vehicles from the market, it is likely that additional human cases of *S. Stanley* infections will be reported in EU Member States. It is important to highlight that persons working in the food chain at all levels (from production to catering) as well as consumers should be very strict with personal (hand washing) and food hygiene (avoid cross-contamination between ready-to-eat and raw meat) when handling raw turkey meat. Further information on the trace-back and trace-forward of foods items in the food chain will be necessary to understand and assess the risk associated with this outbreak. In addition, this information will help in the identification of the primary source of the outbreak strain and to track the spreading along the food chain. This information would in turn help to define the risk management actions to be taken in order to control the contamination with this strain in the animal production and food chain. These targeted measures are expected to help control the outbreak and prevent further human cases. As soon as the information above becomes available, ECDC and EFSA recommend that further actions should be taken by risk managers to detect and contain the *S. Stanley* infection in turkey production and the subsequent contamination of turkey meat, and when necessary, in the broiler production chain. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

EBOLA VIRUS DISEASE (DEMOCRATIC REPUBLIC OF CONGO): 27 September 2012, An outbreak of Ebola virus disease in the Democratic Republic of Congo [DRC] may have killed up to 33 people, while the number of suspected cases has risen, the health ministry said on Thursday [27 Sep 2012]. A total of 79 cases have been recorded, including 19 confirmed positive after laboratory analysis, 32 probable cases and 28 suspected cases, while 33 deaths were registered by 25 Sep 2012, the Ministry announced. 17 of the deaths were confirmed to be caused by Ebola virus infection. The World Health Organization (WHO) said that the fatality rate was almost 42 percent. The WHO added that a baby born prematurely in the isolation centre in Isiro -- the epicentre of the epidemic in northeastern DRC -- to a mother infected by Ebola virus had died on Thursday, the statement said. In DRC, it was the 1st time a pregnant Ebola disease patient had given birth, because "Ebola disease and pregnancy are almost incompatible," Health Minister Felix Kabange Numbi said after the baby was born. To date, there is no treatment or vaccine for Ebola disease, which kills between 25 percent and 90 percent of patients depending on the strain of the virus. There have been 8 outbreaks in the DRC. The disease is transmitted by direct contact with blood, feces and sweat, by sexual contact and by unprotected handling of contaminated corpses. Currently, 167 people who have been in contact with the 79 reported cases are under surveillance. "We need to manage to follow all the contacts closely and regularly and to that end, we need to strengthen awareness among the population," Benoit Kebela, the head of the health ministry's unit to fight infectious diseases told Agence France-Presse. Among the 79 reported cases, 24 concern health workers. "We are in control of the situation, because we were able to make efforts in hospital measures -- we have protective equipment," added Dr Kebela, who was on a mission to Isiro. An epidemic was declared in mid-August in Orientale province, but the international committee for the fight against Ebola has carried out research and dated the outbreak back to May [2012]. The ministry of health, the WHO, the Centers for Disease Control in Atlanta, Georgia, and Doctors Without Borders (MSF - Medecins Sans Frontieres) are working in close collaboration to combat the outbreak. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from <http://www.promedmail.org/>.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmm.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	<p>ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)</p> <p>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus</p> <p>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis</p> <p>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain</p> <p>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE <i>acute exacerbation</i> of chronic illnesses.)</p>	<p>Anthrax (inhalational)</p> <p>Tularemia</p> <p>Plague (pneumonic)</p>
Neurological	<p>ACUTE neurological infection of the central nervous system (CNS)</p> <p>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis</p> <p>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS</p> <p>ACUTE non-specific symptoms of CNS infection such as meningismus, delirium</p> <p>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's</p>	Not applicable
Rash	<p>ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)</p> <p>SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox</p> <p>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem</p> <p>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheic dermatitis, rosacea</p> <p>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema</p>	Smallpox
Specific Infection	<p>ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)</p> <p>INCLUDES septicemia from known bacteria</p> <p>INCLUDES other febrile illnesses such as scarlet fever</p>	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Fever	<p>ACUTE potentially febrile illness of origin not specified</p> <p>INCLUDES fever and septicemia not otherwise specified</p> <p>INCLUDES unspecified viral illness even though unknown if fever is present</p> <p>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome</p>	Not applicable
Severe Illness or Death potentially due to infectious disease	<p>ACUTE onset of shock or coma from potentially infectious causes</p> <p>EXCLUDES shock from trauma</p> <p>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births</p> <p>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths</p>	Not applicable